

# PATENT SPECIFICATION

DRAWINGS ATTACHED

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## COMPLETE SPECIFICATION

### Device for Ventilation of Motor Vehicles

5 I, FOONG U SAN, of 83A, Kuala Kangsar Road, Ipoh, State of Perak, Malaya, a citizen of the Federation of Malaya, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

10 This invention relates to the ventilation of motor vehicles, such as saloons, coupes, sedans, station wagons and trucks, having closed bodies or cabs fitted with vertically slidable window lights, which normally have to be raised to closed position in order to prevent 15 ingress of rain, dust and other matter. Under such conditions, the windscreen and other lights are liable to become misted or blurred and the internal temperature may rise to an uncomfortable extent, due to the occupants' 20 respiration and other causes.

25 The present invention consists of a device for the ventilation of motor vehicles, including a sheet-metal shield, one edge of the shield having a flange for fitting to the top edge of a window opening and the opposite edge of the shield being rolled or beaded and having a piece of wire enclosed by the roll or beading.

30 The invention is hereinafter described with reference to the accompanying drawings, in which:—

Figures 1 and 2 illustrate upper portions of car windows of different shapes, fitted with the ventilation device.

35 Figure 3 is an inside view of the ventilation device before fitting to the car window, this view being on a larger scale.

Figures 4, 5 and 6 are details, in section on a still larger scale, showing different embodiments of the ventilation device.

40 Figures 7 and 8 illustrate in perspective alternative means for holding the ventilation device in place.

Referring to Figures 1 and 2, the car window opening usually has a straight upper edge 10, but its upper corners may be of square or rounded shape, as indicated at 11 and 12 re-

spectively. The slidable window light 13 usually has vertical front and rear edges, guided at the sides of the window opening, as indicated at 14 and 15 respectively in Figure 1, but its front vertical edge may co-operate with a fixed or adjustable panel, as indicated at 16 in Figure 2, normally filling the gap in front of the window light.

50 According to the invention, the upper edge 55 of the window opening is fitted with an overhanging shield 17, shown separately in Figure 3, formed by a length of sheet metal, which permits the window light 13 to be left partly open for circulation of fresh air within the car, without permitting the entry of rain, dust and other matter. As seen in Figure 3, this shield 17 has an upper flange 18, which can be inserted on the inside of the window opening, between the window frame and the fabric or other lining, the shield 17 then overhanging the opening at a suitable angle, for 60 example 45 degrees, more or less, so as to catch any rain drops or other matter attempting to enter above the partly open window light. The outer edge 20 of the shield is rolled or beaded, with a piece of rust-proof wire enclosed in the beading to give it strength and rigidity, this beading being continued around the ends 19 of the shield, which are shaped to 65 suit the form of the corners of the window opening, the flange 18 being also continued around these corners.

70 The shield 17 may be held firmly in place by means of screws, for example of self-tapping type, passing through the flange 18 at the inner edge of the shield and engaging in the window frame. But in order to avoid damage to the window frame, while giving a positive attachment, the shield is preferably 75 held in place by means of hooks 24, as shown in Figure 4, fitted into the channel at the top of the opening. These hooks may be secured to the window frame by means of self-tapping screws 23, each hook having a projecting tongue 25 which is passed into a hole or slot 80 26 in the flange 18. One of the hooks 24 is 85 90



Figures

5 shown in perspective in Figure 8, as including a channel 27 into which the upper edge of the window light 13 can be raised when it is desired to close the window opening completely. Figure 6 shows the hook 24 as being wedged in place inside the window channel by means of a tapering metal block 28.

10 Figure 5 and 7 show an alternative form of hook or holder, also adapted for securing by means of a self-tapping screw, this holder having a projecting tab 29 which supports the shield 17, adjacent to the flange 18, which is inserted into the window channel and held by the tab-provided hook.

15 If desired, the flange 18 may be pierced with screw holes 30 or punched to form points or spikes 31, as seen in Figure 3, these spikes engaging with the fabric lining over the window opening.

20 The sheet-metal shield 17 may be chromium-plated and polished, ornamented with whirls or other designs, or otherwise made to enhance the appearance of the car.

#### WHAT I CLAIM IS:—

25 1. A device for the ventilation of motor vehicles including a sheet-metal shield, one edge of the shield having a flange for fitting to the top edge of a window opening and the opposite edge of the shield being rolled or

beaded and having a piece of wire enclosed 30 by the roll or beading.

2. A device according to Claim 1 in which the shield includes a straight portion having curved ends.

3. A device according to Claim 1 or 2 in which the shield includes a straight portion, 35 the plane of the flange being at an angle of about 45° to the plane of the straight portion.

4. A device according to any one of the preceding Claims which includes hooks or 40 holders having channel portions for securing to the inside of the window opening and for permitting the window light to close completely.

5. A device according to Claim 4 in which 45 there are holes in the flange co-operable with the hooks.

6. A device for the ventilation of motor vehicles substantially as hereinbefore described with reference to and as illustrated in Figures 50 1, 2 and 3 or Figures 4 and 8 or Figures 5 and 7 or Figure 6 of the accompanying drawings.

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figures

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